1000

1010

1020

Host

Archive Manager

1100

1030

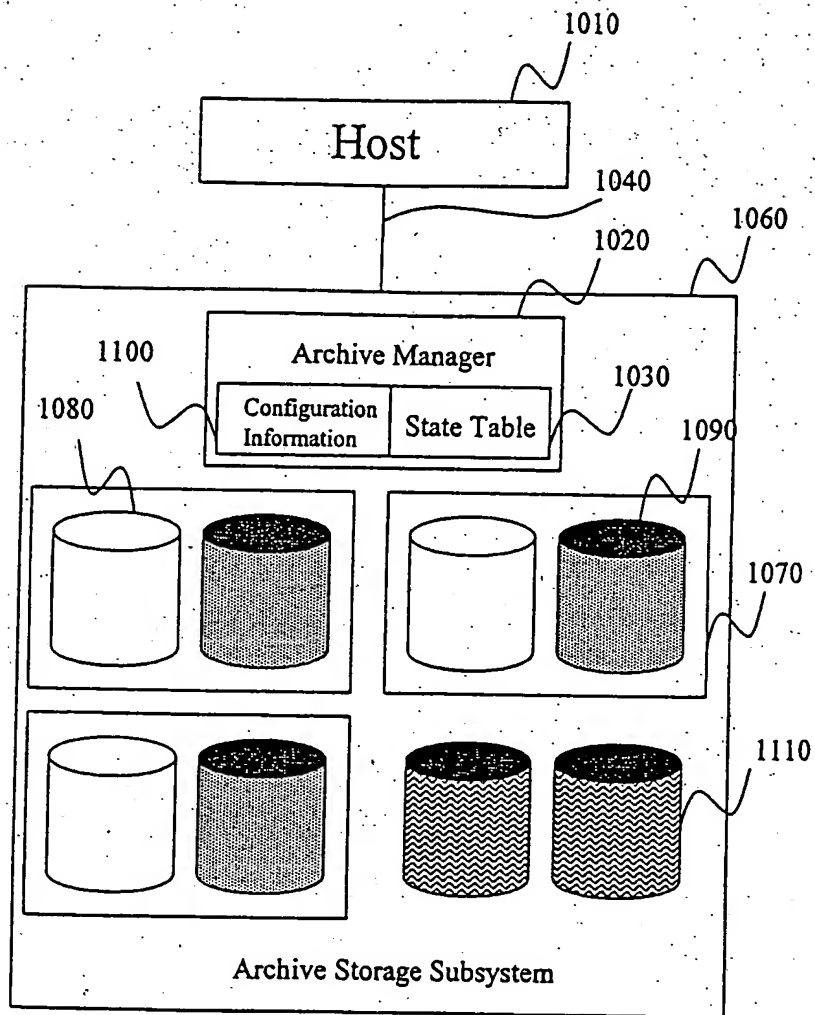| Configuration Information | State Table |

1080   1090

1040   1060

1070

Archive Storage Subsystem

1110

Fig 1 : Basic Configuration of a Storage System for Archives

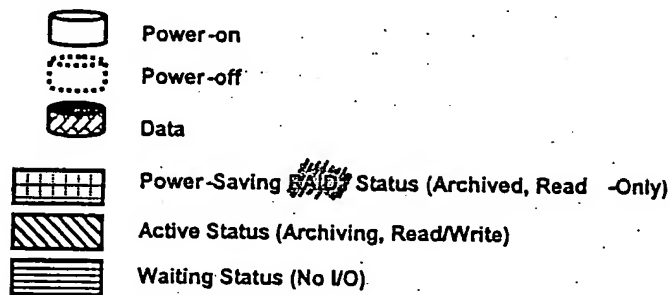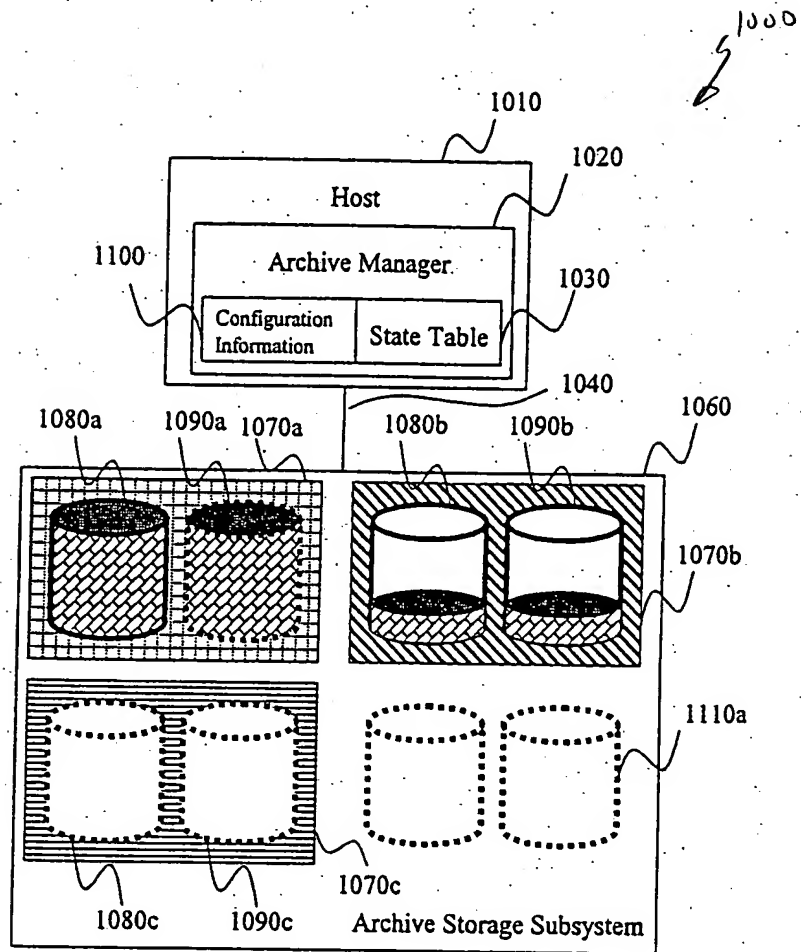Fig 2: the Archive Manager in the Archive Storage Subsystem

1000

1010

1020

Host

1100

Archive Manager.

1030

| Configuration Information | State Table |

1040

1080a 1090a 1070a 1080b 1090b 1060

1070b

1110a

1070c

1080c 1090c Archive Storage Subsystem

Power-on

Power-off

Data

Power-Saving RAID Status (Archived, Read -Only)

Active Status (Archiving, Read/Write)

Waiting Status (No I/O)

Fig 3 : Status of RAID1

1100

	Default	Setting Range
Number of Disk in RAID1 Group	2	less or equal total of disk
Number of Accessible Disk in RAID1 Group	1	less or equal Number of Disk in RAID1 Group
Power Status of Accessible Disk *(Power saving)*	~~ON~~ Saving mode	ON, Saving mode, OFF
Power Status of Standby Disk *(Power saving)*	OFF	ON, Saving mode, OFF
Power Status of Waiting Disk	OFF	ON, Saving mode, OFF
Trigger of Role Reversal for Power Saving RAID1	Time (one week)	Time (day, week, month), Equation of Access Time
Threshold of Maintenance Warning	70% of total used space	total used space (%), total used space (Giga Bytes)
Number of Spare Disk	10% of Number of Disk in Archive Storage Subsystem	less or equal a half of Number of Disk in Archive Storage Subsystem
Time of Mode Switching	1 week	hour, day, week, month
Rewrite after read-only	No	Yes, No

3010, 3020, 3030, 3120, 3040, 3050, 3060, 3090, 3100, 3110

3070, 3080

Fig 4 : Configuration Information

1030

2090   2095

	disk00	disk01	disk02	disk03	disk04	disk05	Total
Power Status	On	Off	On	On	Off	Off	.
Disk Condition	good	good	good	good	good	good	.
RAID1 Group #	0000	0000	0001	0001	0002	0002	.
Operational Mode	Power saving		active		waiting		.
Attributes	Read-only		R/W		No I/O		2.
Used space	320GB		20GB		0GB		340GB
Free space	0GB		300GB		320GB		620GB
Total RAID1 size	320GB		320GB		320GB		960GB

2010
2020
2030
2040
2050
2060
2070
2080

2130
2100
2110
2120

Fig 5 : State Table

1070a   1070b   1070c

4000
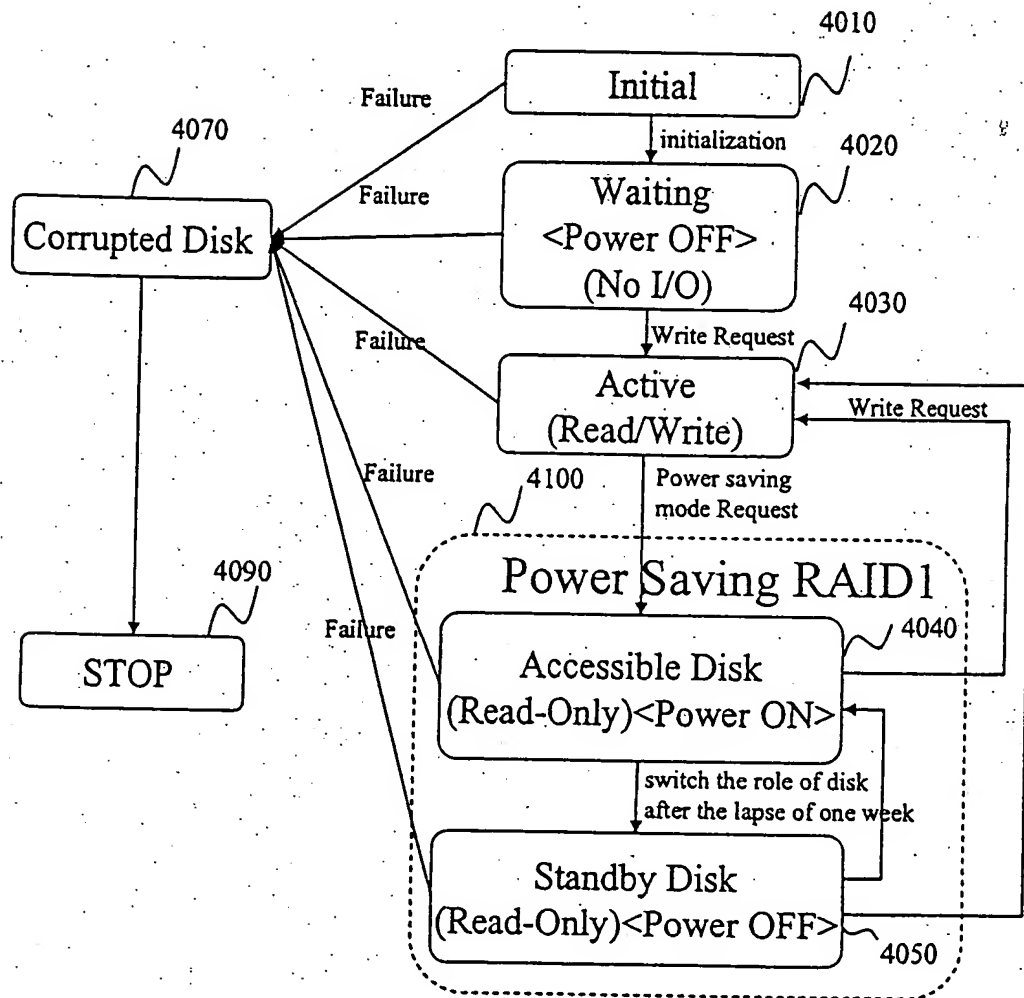

Fig 6 : State Transition Diagram (default)
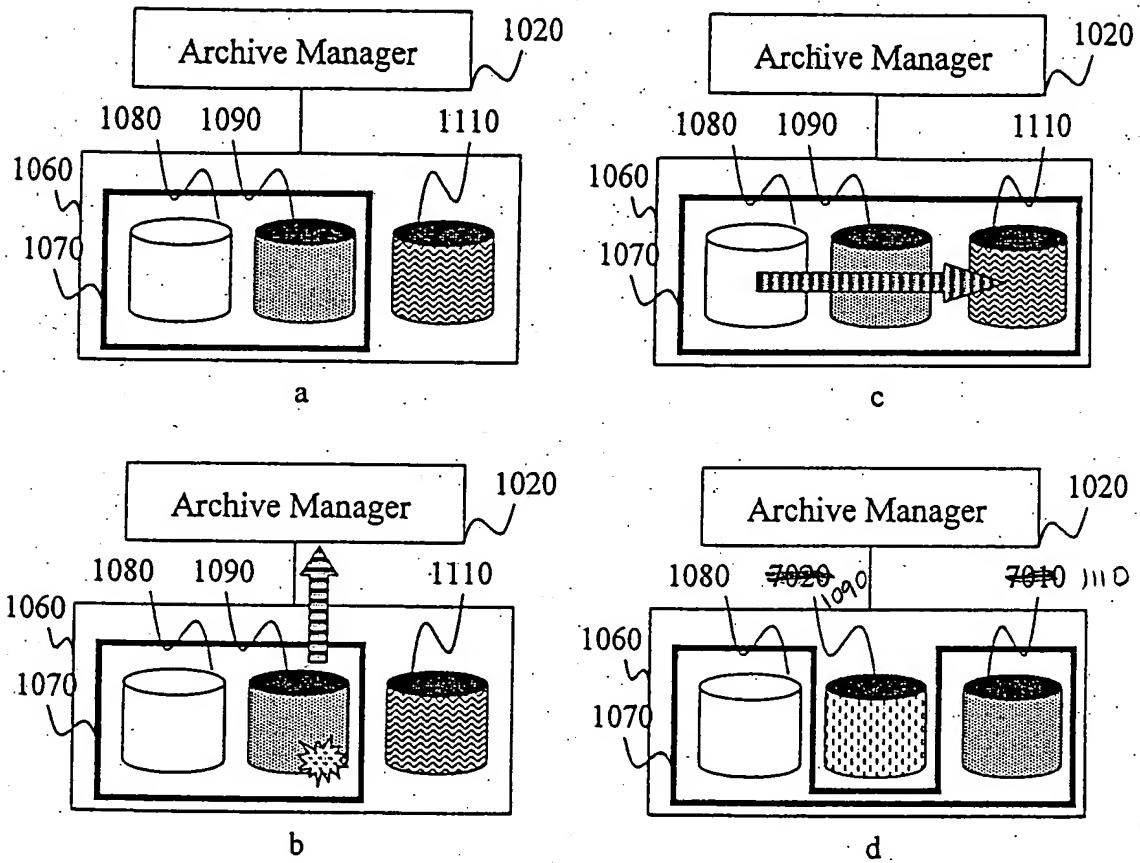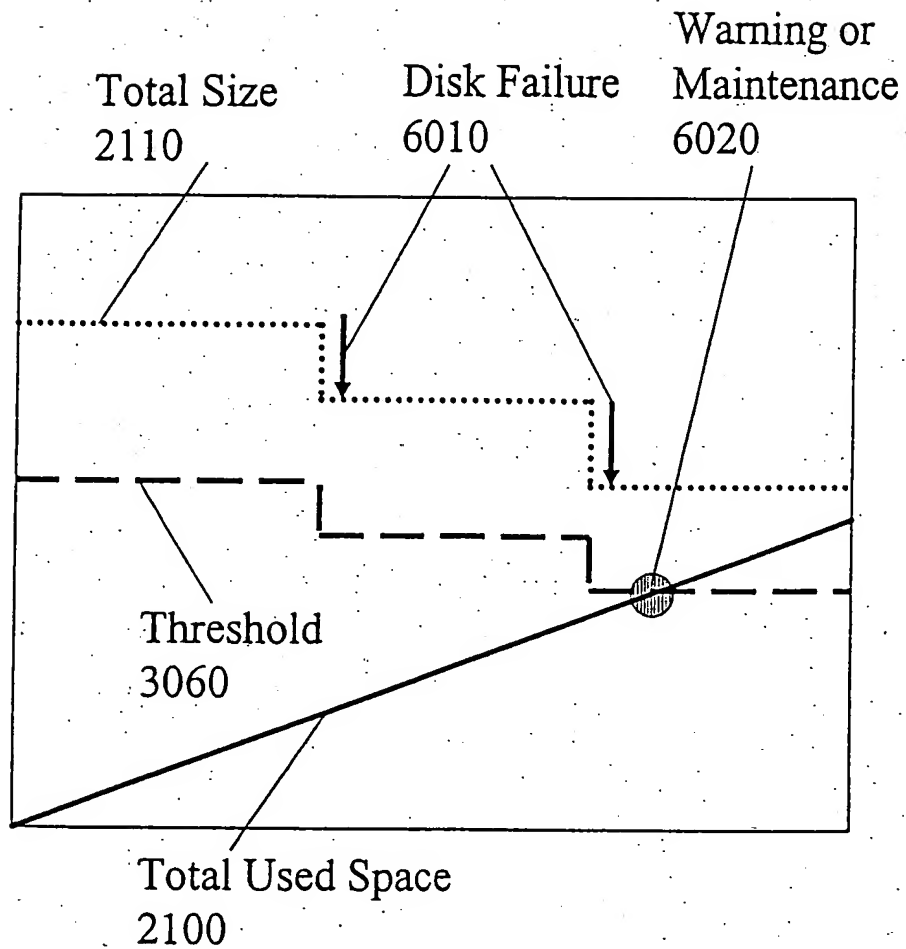
Fig 7 : Self-Repairing of RAID1 Group

Total Size 2110

Disk Failure 6010

Warning or Maintenance 6020

Threshold 3060

Total Used Space 2100

Fig 8 : Threshold Management

9010
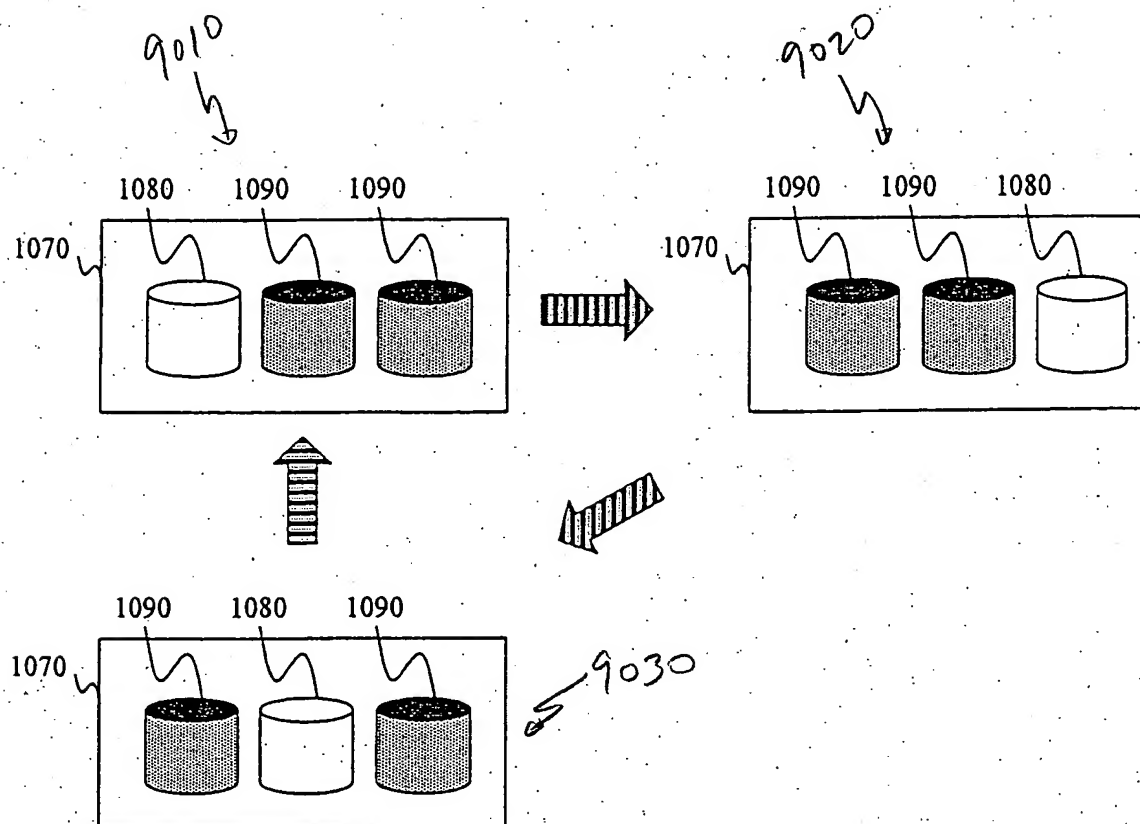
9020

1080   1090   1090

1070

1090   1090   1080

1070

1090   1080   1090

1070

9030

Fig 9 : Role Reversal of Disks